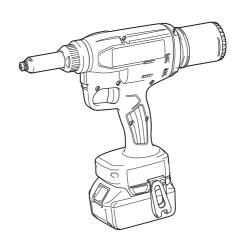
# **INSTRUCTION MANUAL**



# **Cordless Rivet Gun**

# **DRV150 DRV250**





# **SPECIFICATIONS**

Model:	DRV150	DRV250	
Pulling force	10 kN	20 kN	
Stroke	25 mm 30 mm		
Overall length	313 mm	323 mm	
Rated voltage	D.C. 18 V		
Net weight	1.9 - 2.2 kg	2.1 - 2.4 kg	

- Due to our continuing program of research and development, the specifications herein are subject to change without notice.
- Specifications may differ from country to country.
- The weight may differ depending on the attachment(s), including the battery cartridge. The lightest and heaviest combination, according to EPTA-Procedure 01/2014, are shown in the table.

## Applicable battery cartridge and charger

Battery cartridge	BL1815N / BL1820 / BL1820B / BL1830 / BL1830B / BL1840 / BL1840B / BL1850 / BL1850B / BL1860B			
Charger	DC18RC / DC18RD / DC18RE / DC18SD / DC18SE / DC18SF / DC18SH			

Some of the battery cartridges and chargers listed above may not be available depending on your region of residence.

**AWARNING:** Only use the battery cartridges and chargers listed above. Use of any other battery cartridges and chargers may cause injury and/or fire.

### **Symbols**

The followings show the symbols used for the equipment. Be sure that you understand their meaning before use.



Read instruction manual.



Only for EU countries

Do not dispose of electric equipment or battery pack together with household waste material!

In observance of the European Directives, on Waste Electric and Electronic Equipment and Batteries and Accumulators and Waste Batteries and Accumulators and their implementation in accordance with national laws, electric equipment and batteries and battery pack(s) that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.

### Intended use

The tool is intended for installing blind rivet.

### Noise

The typical A-weighted noise level determined according to EN62841-1:

### Model DRV150

Sound pressure level (LpA): 75 dB(A)

Uncertainty (K): 3 dB(A)

#### Model DRV250

Sound pressure level (L<sub>DA</sub>): 74 dB(A)

Uncertainty (K): 3 dB(A)

The noise level under working may exceed 80 dB (A).

**NOTE:** The declared noise emission value(s) has been measured in accordance with a standard test method and may be used for comparing one tool with another.

**NOTE:** The declared noise emission value(s) may also be used in a preliminary assessment of exposure.

**AWARNING:** Wear ear protection.

WARNING: The noise emission during actual use of the power tool can differ from the declared value(s) depending on the ways in which the tool is used especially what kind of workpiece is processed.

▲ WARNING: Be sure to identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

### Vibration

The vibration total value (tri-axial vector sum) determined according to EN62841-1:

### Model DRV150

Work mode: Installing blind rivet Vibration emission (a<sub>h</sub>): 2.5 m/s<sup>2</sup> or less

Uncertainty (K): 1.5 m/s<sup>2</sup>

### Model DRV250

Work mode: Installing blind rivet

Vibration emission (a<sub>h</sub>): 2.5 m/s<sup>2</sup> or less

Uncertainty (K): 1.5 m/s<sup>2</sup>

**NOTE:** The declared vibration total value(s) has been measured in accordance with a standard test method and may be used for comparing one tool with another.

**NOTE:** The declared vibration total value(s) may also be used in a preliminary assessment of exposure.

▲ WARNING: The vibration emission during actual use of the power tool can differ from the declared value(s) depending on the ways in which the tool is used especially what kind of workpiece is processed.

▲ WARNING: Be sure to identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

### **EC Declaration of Conformity**

### For European countries only

The EC declaration of conformity is included as Annex A to this instruction manual.

# SAFETY WARNINGS

### General power tool safety warnings

▲ WARNING: Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

# Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

### Work area safety

- Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

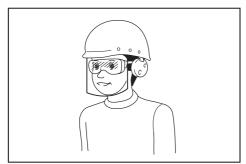
### **Electrical safety**

- Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.

- Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock
- If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.
- Power tools can produce electromagnetic fields (EMF) that are not harmful to the user. However, users of pacemakers and other similar medical devices should contact the maker of their device and/or doctor for advice before operating this power tool.

### Personal safety

- Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- Use personal protective equipment. Always wear eye protection. Protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.
- Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- Dress properly. Do not wear loose clothing or jewellery. Keep your hair and clothing away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.
- Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles. A careless action can cause severe injury within a fraction of a second.
- Always wear protective goggles to protect your eyes from injury when using power tools. The goggles must comply with ANSI Z87.1 in the USA, EN 166 in Europe, or AS/NZS 1336 in Australia/New Zealand. In Australia/New Zealand, it is legally required to wear a face shield to protect your face, too.



It is an employer's responsibility to enforce the use of appropriate safety protective equipments by the tool operators and by other persons in the immediate working area.

### Power tool use and care

- Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
- Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- Disconnect the plug from the power source and/or remove the battery pack, if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.
- Keep handles and grasping surfaces dry, clean and free from oil and grease. Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.
- When using the tool, do not wear cloth work gloves which may be entangled. The entanglement of cloth work gloves in the moving parts may result in personal injury.

#### Battery tool use and care

 Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.

- Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
- When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.
- Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.
- Do not use a battery pack or tool that is damaged or modified. Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, explosion or risk of injury.
- Do not expose a battery pack or tool to fire or excessive temperature. Exposure to fire or temperature above 130 °C may cause explosion.
- 7. Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specified in the instructions. Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.

### Service

- Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.
- Never service damaged battery packs. Service
  of battery packs should only be performed by the
  manufacturer or authorized service providers.
- Follow instruction for lubricating and changing accessories.

# Cordless rivet gun safety warnings

- 1. Hold the tool firmly.
- 2. Keep hands away from moving parts.
- Always be sure you have a firm footing. Be sure no one is below when using the tool in high locations.
- Be careful not to drop the broken off mandrel from high locations. Doing so may cause an accident or injury.
- Do not scatter the broken off mandrels on the floor. You may be injured by the sharp end of the broken off mandrel or by slipping on the mandrel.
- Do not point the tool at a person or yourself when operating the tool. The rivet or broken off mandrel may accidentally ejected, and you may be injured.

# Important safety instructions for battery cartridge

- Before using battery cartridge, read all instructions and cautionary markings on (1) battery charger, (2) battery, and (3) product using battery.
- 2. Do not disassemble battery cartridge.
- If operating time has become excessively shorter, stop operating immediately. It may result in a risk of overheating, possible burns and even an explosion.

- If electrolyte gets into your eyes, rinse them out with clear water and seek medical attention right away. It may result in loss of your eyesight.
- 5. Do not short the battery cartridge:
  - Do not touch the terminals with any conductive material.
  - Avoid storing battery cartridge in a container with other metal objects such as nails, coins, etc.
  - (3) Do not expose battery cartridge to water or rain. A battery short can cause a large current flow, overheating, possible burns and even a breakdown.
- Do not store the tool and battery cartridge in locations where the temperature may reach or exceed 50 °C (122 °F).
- Do not incinerate the battery cartridge even if it is severely damaged or is completely worn out. The battery cartridge can explode in a fire.
- 8. Be careful not to drop or strike battery.
- 9. Do not use a damaged battery.
- 10. The contained lithium-ion batteries are subject to the Dangerous Goods Legislation requirements. For commercial transports e.g. by third parties, forwarding agents, special requirement on packaging and labeling must be observed. For preparation of the item being shipped, consulting an expert for hazardous material is required. Please also observe possibly more detailed national regulations. Tape or mask off open contacts and pack up the
  - Tape or mask off open contacts and pack up the battery in such a manner that it cannot move around in the packaging.
- When disposing the battery cartridge, remove it from the tool and dispose of it in a safe place. Follow your local regulations relating to disposal of battery.
- Use the batteries only with the products specified by Makita. Installing the batteries to non-compliant products may result in a fire, excessive heat, explosion, or leak of electrolyte.
- If the tool is not used for a long period of time, the battery must be removed from the tool.

# SAVE THESE INSTRUCTIONS.

**ACAUTION:** Only use genuine Makita batteries. Use of non-genuine Makita batteries, or batteries that have been altered, may result in the battery bursting causing fires, personal injury and damage. It will also void the Makita warranty for the Makita tool and charger.

# Tips for maintaining maximum battery life

- Charge the battery cartridge before completely discharged. Always stop tool operation and charge the battery cartridge when you notice less tool power.
- Never recharge a fully charged battery cartridge.
   Overcharging shortens the battery service life.
- Charge the battery cartridge with room temperature at 10 °C 40 °C (50 °F 104 °F). Let a hot battery cartridge cool down before charging it.
- Charge the battery cartridge if you do not use it for a long period (more than six months).

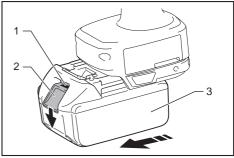
# FUNCTIONAL DESCRIPTION

**ACAUTION:** Always be sure that the tool is switched off and the battery cartridge is removed before adjusting or checking function on the tool.

# Installing or removing battery cartridge

**ACAUTION:** Always switch off the tool before installing or removing of the battery cartridge.

**ACAUTION:** Hold the tool and the battery cartridge firmly when installing or removing battery cartridge. Failure to hold the tool and the battery cartridge firmly may cause them to slip off your hands and result in damage to the tool and battery cartridge and a personal injury.



▶ 1. Red indicator 2. Button 3. Battery cartridge

To remove the battery cartridge, slide it from the tool while sliding the button on the front of the cartridge.

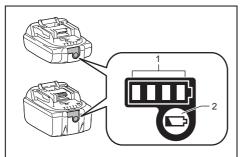
To install the battery cartridge, align the tongue on the battery cartridge with the groove in the housing and slip it into place. Insert it all the way until it locks in place with a little click. If you can see the red indicator on the upper side of the button, it is not locked completely.

**ACAUTION:** Always install the battery cartridge fully until the red indicator cannot be seen. If not, it may accidentally fall out of the tool, causing injury to you or someone around you.

**ACAUTION:** Do not install the battery cartridge forcibly. If the cartridge does not slide in easily, it is not being inserted correctly.

# Indicating the remaining battery capacity

### Only for battery cartridges with the indicator



1. Indicator lamps 2. Check button

Press the check button on the battery cartridge to indicate the remaining battery capacity. The indicator lamps light up for a few seconds.

	Remaining		
Lighted	Off	Blinking	capacity
			75% to 100%
			50% to 75%
			25% to 50%
			0% to 25%
			Charge the battery.
	1 L		The battery may have malfunctioned.

**NOTE:** Depending on the conditions of use and the ambient temperature, the indication may differ slightly from the actual capacity.

## **Tool / battery protection system**

The tool is equipped with a tool/battery protection system. This system automatically cuts off power to the motor to extend tool and battery life. The tool will automatically stop during operation if the tool or battery is placed under one of the following conditions:

# **Overload protection**

When the battery is operated in a manner that causes it to draw an abnormally high current, the tool automatically stops without any indication. In this situation, turn the tool off and stop the application that caused the tool to become overloaded. Then turn the tool on to restart

### Overheat protection

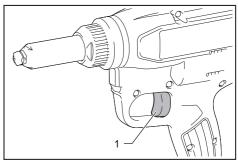
When the tool or battery is overheated, the tool stops automatically and the lamp blinks. In this case, let the tool and battery cool before turning the tool on again.

### Overdischarge protection

When the battery capacity is not enough, the tool stops automatically. In this case, remove the battery from the tool and charge the battery.

### Switch action

▲ WARNING: Before installing the battery cartridge into the tool, always check to see that the switch trigger actuates properly and returns to the "OFF" position when released.



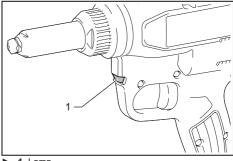
▶ 1. Switch trigger

To start the tool, simply pull the switch trigger. When you release the switch trigger, the tool stops and the returns to the initial position.

The tool may not in the initial position in the following cases. Return the tool to the initial position by pulling and releasing the switch trigger before operating the tool.

- · When using the tool for the first time.
- After replacing the battery cartridge.
- When the tool stops because of the overload.
- After performing the maintenance.

# Lighting up the front lamp



▶ 1. Lamp

**ACAUTION:** Do not look in the light or see the source of light directly.

Pull the switch trigger to light up the lamp. The lamp keeps on lighting while the switch trigger is being pulled. The lamp goes out approximately 10 seconds after releasing the switch trigger.

**NOTE:** Use a dry cloth to wipe the dirt off the lens of the lamp. Be careful not to scratch the lens of lamp, or it may lower the illumination.

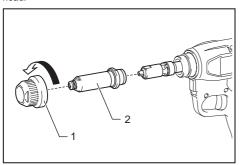
# **ASSEMBLY**

**ACAUTION:** Always be sure that the tool is switched off and the battery cartridge is removed before carrying out any work on the tool.

# Installing or removing the head assembly

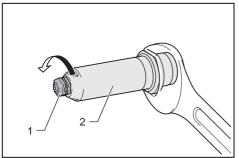
To remove the head assembly, follow the steps below.

1. Loosen the nut of the head, and then remove the head.



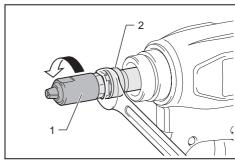
1. Nut 2. Head

2. Loosen the nose piece with a wrench while holding the head with another wrench.



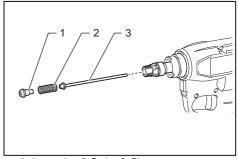
Nose piece 2. Head

**3.** Loosen the jaw case with a wrench while holding the joint with another wrench.



1. Jaw case 2. Joint

4. Remove the jaw pusher, spring, and pipe.



▶ 1. Jaw pusher 2. Spring 3. Pipe

**NOTICE:** When installing the jaw pusher, be sure to attach the spring to the jaw pusher.

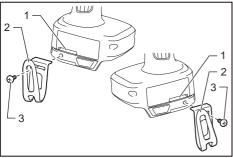
To install the head assembly, perform the removal procedure in reverse. Be sure to tighten the jaw case and nose piece with two wrenches firmly.

### Hook

**ACAUTION:** Always remove the battery when hanging the tool with the hook.

ACAUTION: Never hook the tool at high location or on potentially unstable surface.

**ACAUTION:** When hanging the tool with the hook, hang it carefully. Otherwise, the tool may drop and cause an injury.



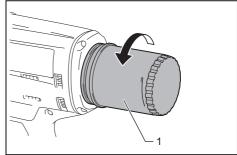
1. Groove 2. Hook 3. Screw

The hook is convenient for temporarily hanging the tool. This can be installed on either side of the tool. To install the hook, insert it into a groove in the tool housing on either side and then secure it with a screw. To remove, loosen the screw and then take it out.

### Installing or removing the mandrel container

**NOTICE:** Be sure to install the mandrel container to the tool before operating the tool. If the mandrel container is not installed to the tool, the tool will not operate.

To remove the mandrel container, rotate it counter clockwise. To install the mandrel container, rotate it clockwise.



1. Mandrel container

# **OPERATION**

**CAUTION:** Keep your hand or face away from the front part of the tool. The rivet or broken off mandrel may accidentally ejected, and you may be injured.

## Installing a blind rivet

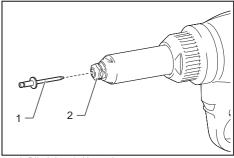
**ACAUTION:** Before the mandrel container becomes full, empty it regularly by removing the mandrel container. Otherwise, the tool may be damaged, and the damaged parts may cause an injury.

**ACAUTION:** When inserting a blind rivet into the nose piece, be sure to switch off the tool. Otherwise, you may be injured with the tool tip.

**CAUTION:** Do not the leave a blind rivet in the nose piece. If the tool is switched on accidentally, the blind rivet is ejected and may cause an injury.

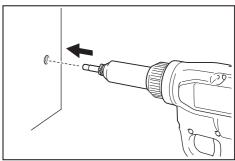
NOTICE: After installing a blind rivet, be sure to eject the broken off mandrel into the mandrel container by tilting the tool backward before installing next blind rivet. If the end of the broken off mandrel sticks out from the nose piece, switch off the tool and remove the mandrel. Otherwise, the broken off mandrels may become clogged and cause a malfunction of the tool.

1. Insert the blind rivet into the nose piece.



▶ 1. Blind rivet 2. Nose piece

2. Press the tool tip against the workpiece, and then pull the switch trigger. After the mandrel is broken off, release the switch trigger.



### Available blind rivets

**NOTICE:** Using nose piece, jaw, jaw pusher, or pipe that does not match the mandrel diameter may cause poor fastening, clogging of the mandrel, or malfunction of the tool.

Refer to the table below for the combination of rivet, nose piece, jaw, jaw pusher, and pipe.

**NOTE:** Some items in the table may be included in the tool package as standard accessories and some items in the table are provided as optional accessories. They may differ from country to country.

### For DRV150

Rivet		Nose piece		Mark on jaw	Jaw pusher		Pipe	
Size	Diameter of mandrel	Mark on nose piece	Hole diameter		Hole diameter	Color	Hole diameter	Color
ø2.4 mm (3/32")	ø1.4 - 1.6 mm	2.4	ø1.9 mm	4.8	ø1.9 mm	Gray	ø2.2 mm	Silver
ø3.2 mm (1/8")	ø1.8 - 2.1 mm	3.2	ø2.4 mm	4.8	ø2.5 mm	Black	ø2.6 mm	Black
ø4.0 mm (5/32")	ø2.2 - 2.6 mm	4.0	ø3.0 mm	4.8	ø3.1 mm	Gray	None *	_
ø4.8 mm (3/16")	ø2.6 - 3.2 mm	4.8	ø3.6 mm	4.8	ø3.6 mm	Black	None *	-

<sup>\*.</sup> Pipe is not necessary for operation.

### For DRV250

Rivet		Nose piece		Mark on jaw	Jaw pusher		Pipe	
Size	Diameter of mandrel	Mark on nose piece	Hole diameter		Hole diameter	Color	Hole diameter	Color
ø2.4 mm (3/32")	ø1.4 - 1.6 mm	2.4	ø1.9 mm	4.8	ø1.9 mm	Gray	ø2.2 mm	Silver
ø3.2 mm (1/8")	ø1.8 - 2.1 mm	3.2	ø2.4 mm	4.8	ø2.5 mm	Black	ø2.6 mm	Black
ø4.0 mm (5/32")	ø2.2 - 2.6 mm	4.0	ø3.0 mm	4.8	ø3.1 mm	Gray	ø3.4 mm	Silver
ø4.8 mm (3/16")	ø2.6 - 3.2 mm	4.8	ø3.6 mm	4.8 or 6.4	ø3.6 mm	Black	ø4.1 mm	Black
ø6.0 mm (1/4") *	ø3.1 - 3.5 mm	6.0	ø4.0 mm	6.4	ø4.0 mm	Gray	ø4.1 mm	Black
ø6.4 mm (1/4") *	ø3.5 - 3.9 mm	6.4	ø4.4 mm	6.4	ø4.6 mm	Black	ø4.5 mm	Silver

<sup>\*.</sup> Stainless steel rivet is not available.

# **MAINTENANCE**

ACAUTION: Always be sure that the tool is switched off and the battery cartridge is removed before attempting to perform inspection or maintenance.

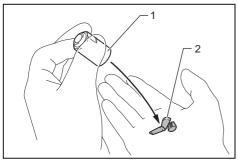
**NOTICE:** Never use gasoline, benzine, thinner, alcohol or the like. Discoloration, deformation or cracks may result.

To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by Makita Authorized or Factory Service Centers, always using Makita replacement parts.

## Cleaning the jaws and jaw case

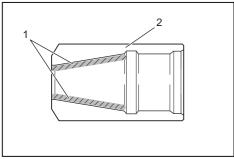
Interval of cleaning: Every 3,000 installations of rivet If the dust is accumulated, it deteriorates the movement of jaws and may accelerate wear of jaws and jaw case. To clean the jaws and jaw case, follow the steps below.

- 1. Remove the jaw case. For the removal procedure, refer to the removal instructions for the head assembly.
- 2. Remove the jaws from the jaw case.



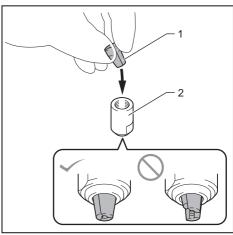
1. Jaw case 2. Jaw

- 3. Clean the jaws and jaw case with a brush. Remove metal powder clogged between the teeth of the jaws.
- **4.** Apply molybdenum disulfide based grease evenly to the inner periphery of the jaw case.



▶ 1. Area to apply grease 2. Jaw case

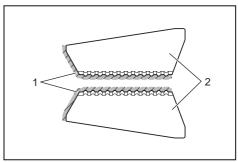
5. Install the jaws to the jaw case.



▶ 1. Jaw 2. Jaw case

**NOTICE:** When installing the jaws, be sure to align the tips of jaws.

**6.** Install the jaw case. If the grease is adhered to the tips of the jaws, wipe off the grease with a dry cloth.



1. Area where grease should not to be adhered
 2. Jaw

- 7. Install the head assembly.
- 8. Wipe off the grease from the jaws.

Insert a rivet into the nose piece, then move it up and down, and left and right, then remove it from the nose piece, and then wipe the grease from the rivet with a dry cloth. Repeat the same procedure twice or 3 times.

**NOTICE:** If the grease is adhered to the tip or inside of the jaw, the jaws may slip during operation.

## Replacing the jaws in the jaw case

If the jaws in the jaw case are worn out, replace them with new ones. To replace the jaws, follow the same procedure for cleaning the jaws and jaw case. When installing jaws to the jaw case, install new jaws.

# Removing jammed rivet

If the rivet is jammed inside the tool, remove it using a tool such as pin. If it is difficult to remove the jammed rivet, replace the jaw pusher or pipe with a new one. For replacement procedure, refer to the instruction for installing or removing the head assembly.

# OPTIONAL ACCESSORIES

**ACAUTION:** These accessories or attachments are recommended for use with your Makita tool specified in this manual. The use of any other accessories or attachments might present a risk of injury to persons. Only use accessory or attachment for its stated purpose.

If you need any assistance for more details regarding these accessories, ask your local Makita Service Center.

- Nose piece
- Jaw pusher
- Jaw
- Pipe
- Grease
- Makita genuine battery and charger

**NOTE:** Some items in the list may be included in the tool package as standard accessories. They may differ from country to country.

Makita Europe N.V. Jan-Baptist Vinkstraat 2, 3070 Kortenberg, Belgium 3-11-8, Sumiyoshi-cho, Makita Corporation

Anjo, Aichi 446-8502 Japan

www.makita.com

885691-222 EN 20190701